## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

1. (Currently Amended) A method of detecting portable objects using a network of N antennae, controlled by a centralized management unit, comprising the following steps:

transmitting signals simultaneously to all the antennae from said management unit.

receiving a resulting signal by said management unit, said resulting signal comprising response signals from the antennae which have detected a portable object respectively at an input port of said management unit that is assigned to each antenna, and adding said signals to form a resulting signal, and

successively selecting each object detected from this resultant resulting signal, according to a pre-established sequence.

2. (Previously Presented) A detection method according to Claim 1, wherein the successive selection of each object is effected by the use of an anti-collision algorithm.

Claims 3 and 4. (Canceled)

- 5. (Previously Presented) A detection method according to claim 1, wherein the reception of the resulting signal includes a step of identifying the origin of the response signals forming said resulting signal.
- 6. (Currently Amended) A detection method according to claim [[14]] 5, wherein the identification of a response signal includes a step of storing the identification of the antenna associated with the input port at which the response signal is received.
- 7. (Previously Presented) A detection method according to Claim 6, wherein said storing step includes positioning a flip-flop in a logic state and deactivating it when the unit has entered into communication with the portable object detected by the corresponding antenna.

Claim 8. (Canceled)

9. (Currently Amended) A system of detecting portable objects including a network of N antennae associated with transmission/reception means and a centralized management unit, comprising:

transmission means in the management unit that is connected to transmission/reception means of the antennae and that sends signals simultaneously to all the antennae,

reception means in said unit that is connected to said transmission/reception means and that receives response signals from the antennae which have detected a

portable object, in the form of distinct signals for each antenna [[or]] respectively at an input port of said management unit that is assigned to each antenna, and adds said signals to form a resulting signal in accordance with the type of connection established between the transmission and reception means of the management unit and the antennae, and

means for successively selecting each portable object detected according to a pre-established sequence.

- 10. (Previously Presented) A detection system according to Claim 9, wherein the means for successively selecting each portable object detected in a preestablished sequence includes an anti-collision algorithm.
- 11. (Previously Presented) A detection system according to Claim 9 wherein the transmission and reception means of the management unit and the transmission/reception means of the antenna are connected in point-to-point mode by connections of the serial transmission type.

Claim 12. (Canceled)

13. (Previously Presented) A detection system according to Claim 11, wherein the management unit includes an antenna discriminator.

Claims 14 and 15. (Canceled)